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ABSTRACT

With a construct-centered reliability analytical approach the reliability analysis should crystallize the multi-trait or constructs that the test specialists developed to measure from student performance and then estimate the degree of fit between the theoretical expectations of test developers and the performance exhibited by students. This study attempts to provide an empirical example of a construct-centered reliability analysis using writing performance assessment data from a large urban school district. Writing assessments from 17,330 students in grades 3, 5, and 8 were used in the analysis. Scoring guides were developed, centering the constructs comprised of dimensions for raters to consider when scoring. Resampling was done by randomly selecting three of four percent of the students from the assessments before a generalizability study with a fully crossed two-facet design was conducted. A large proportion of variance was estimated due to the constructs of rhetorical effectiveness and conventions, as well as the interaction between constructs and raters. Variance due to rater facet was very small. An array of acceptable G coefficients across samples was obtained. It is suggested that high reliability or generalizability is achievable using a construct-centered reliability approach to identify construct relevant variances when there is a high degree of fit between the substantive expectations generated from the test specialists' understanding of the construct as realized by the measurement procedure and observation. (Contains 7 tables, 12 charts, and 10 references.) (SLD)

A Construct-Centered Generalizability Model: Analyzing Underlying Constructs of Cognitively Complex Performance Assessments

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Abstract

Performance assessment differs from traditional assessment in that it claims to measure multi-trait simultaneously rather than consistently measure single trait. Traditional reliability analyses oversimplify issues of generalizability and stability when applied to cognitively complex performance assessments. Nichols and Sugrue (1998) recommend that reliability analyses incorporate the complex cognitive assumptions so that performance assessments more faithfully represent the multidimensional constructs common to performance assessments. More specifically, with cognitively complex assessments, reliability or generalizability must be reconceptualized to reflect the theoretical expectations of the test developer as well as the complex thinking of the test takers (e.g. problem solving, communication of ideas; reasoning etc.) (Nichols and Smith, 1998). With a construct-centered reliability analytical approach, the reliability analysis should crystallize the multi-trait or constructs that the test specialists developed to measure from student performance, and then estimate the degree of fit between the theoretical expectations from test developers and the performance exhibited by the students.

This study attempted to provide an empirical example of a construct-centered reliability analysis using writing performance assessment data from a large, urban school district. Approximately 31,645 writing assessments taken in English during the spring of 1998 at 6 grade levels. Grade 3, 5, and 8 writing assessments were used in the analysis. The data used for this analysis contains student responses to one writing prompt for each student. The assessments were designed focusing on the constructs underlying different domains tested. Meanwhile, scoring guides were developed centering the constructs comprised of dimensions for raters to consider when scoring. Raters were trained to follow the construct-centered-scoring guide. Resampling was done by randomly selecting 3-4 % of the students involved in the assessments before a generalizability study with a fully crossed two-facet design was conducted. Large proportion of variance was estimated due to the constructs of rhetorical effectiveness and conventions as well as the interaction between constructs and raters. Variance due to rater facet was very small. An array of acceptable G coefficients across samples was obtained. It is suggested that high reliability or generalizability is achievable using construct-centered reliability analytical approach to identify construct relevant variances where there is a high degree of fit between the substantive expectations generated from the test specialist's understanding of the construct-as realized by the measurement procedure-and observation (Nichols and Smith, 1998).

A Construct-Centered Generalizability Model: Analyzing Underlying Constructs of Cognitively Complex Performance Assessments

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The Methodological Challenge

Generalizability problems in cognitively complex assessments. Traditional reliability analyses oversimplify issues of generalizability and stability when applied to cognitively complex performance assessments. To add to the challenge of estimating reliability or generalizability of cognitively complex assessments, proponents of both performance and portfolio assessments build them to measure multidimensional constructs (Romberg and Wilson, 1995; Wiggins, 1993).

Unfortunately, a large body of research (Koretz, McCafferey, Klein, Bell, & Stecher, 1992; Shavelson, Gao, & Baxter, 1993, etc.) reports low reliability or generalizability indices for performance assessments. The multidimensionality of constructs, which we call "cognitive complexity" is hinted at in traditional generalizability analyses. Jiang, Smith and Nichols (1997) conducted a meta-analysis of 22 studies using cognitively complex performance tests and found that between-task variance was the major facet, and significantly larger than between-student variance. Task variance, under traditional conceptualizations of reliability, is something to be "factored out" or "equalized" rather than incorporated into generalizability estimates. The problem with task variance "swamping" the variance associated with students creates a "Catch-22" for developers of performance assessments who create measures under different assumptions than those created by random sampling theory.

Construct Centered Generalizability. Recent work in reliability theory proposes that in cognitively complex assessments, the distinction between "reliability" and "validity" becomes blurred. The same conclusion was reported in validity theory as well (Cronbach, 1988, 1989 ; Messick, 1989) with the "unitary" concept of validity. Nichols and Sugrue (1998) recommend that reliability analyses incorporate the complex cognitive assumptions so that performance assessments more faithfully represent the multidimensional constructs common to performance assessments.

More specifically, with cognitively complex assessments, reliability or generalizability must be reconceptualized to reflect the theoretical expectations of the test developer as well as the complex thinking of the test takers (e.g. problem solving, communication of ideas; reasoning etc.) (Nichols and Smith, 1998). The logical implication for practice is that test developers should incorporate both the 1) theoretical expectations/constructs to be tested and 2) multi-trait, complex thinking required of the test takers into their reliability analyses.

How Might Construct Centered Reliability Work?

Overview of the study. Conceptually, a performance assessment score may be viewed as a sample of student performance drawn from a complex universe defined by a combination of all the admissible tasks, occasions, raters, and measurement methods. Generalizability theory refers to each of these dimensions as "facets". The task facet represents the content in a subject-matter domain; the occasion facet includes all possible occasions on which a decision maker would be equally willing to accept a score on the performance assessment. The rater facet includes all possible individuals who are trained to score the performance reliably. Typically, these three

facets are viewed as primary sources of error in a measurement procedure, especially a performance assessment.

Traditional reliability analysis is concerned with the homogeneity of the tasks comprising an assessment. Assessments based on traditional measurement models are intended to measure a single phenomenon, or a 'unitary trait'. The dependability of an assessment is assessed by a reliability or generalizability coefficient, which is a function of the degree of homogeneity of tasks and number of tasks. Within traditional reliability frame, a highly dependable assessment is comprised of a sufficiently large number of homogeneous tasks. The conditions to grant acceptably dependable assessments impose a difficult challenge to performance writing assessments, as it is not only inappropriate but also impossible to administer 'a sufficiently large number of homogeneous writing tasks' to a large number of students.

Performance assessment differs from traditional assessment in that it claims to measures multi-trait simultaneously rather than consistently measuring a single trait. With a construct-centered reliability analytical approach, the reliability analysis should crystallize the multi-trait or constructs that the test specialists developed to measure from student performance, and then estimate the degree of fit between the theoretical expectations from test developers and the performance exhibited by the students. Hence, a good scoring rubric should reflect well the theoretical expectations or the multi-trait or constructs the assessment is developed to measure. Since one assessment is comprised of multi-trait rather than single traits, we should further decompose or unfold tasks into mini-tasks, which are the smaller and more homogeneous dimensions that comprise the multi-trait or constructs for each performance assessment. Since there are mini-tasks nested within the multi-trait, the level of reliability analysis should reflect this hierarchical structure. Further more, when reliability analysis incorporates the theoretical expectations from test specialists, more variance is defined systematically rather than left undefined as residue or error variance, thus, granting higher assessment dependability using traditional methods.

The purpose of this study was to provide an empirical example of a construct-centered reliability analysis using writing performance assessment data from a large, urban school district. Approximately 31,645 writing assessments were taken in English during the spring of 1998 at 6 grade levels. We used grade 3, 5, and 8 writing assessments in the analysis.

Sample and Methods

Sample. The district from which our study data were taken administers writing performance assessments in grades 3, 5, 6, 8, 10 and 11 each spring. The sample data used were from Spring 98. The assessments are given to all students at the grade level and used for program evaluation purposes. Two prompts from the same writing domain are administered at each grade level. Students are randomly assigned to prompts.

Table 1 displays the number of assessments, writing domains assessed in English and grade levels included in the study.

Table 1
Number of Student Writing Assessments in English by Grade Level

Grade Level	Writing Domain Tested	Number of Assessments
3	Autobiographical Incident	5488
5	Observation	6009
8	Speculation about Cause-Effect	5833
TOTAL		17330

The student population in our sample is quite diverse. The district is 54.8% Free and Reduced Price Lunch, 40.7% Hispanic, 20.2% African American, 14% Asian and, 19.4% white. The percent of English Language Learners ranges from 40.7% at the elementary level to 29% at Middle and 22.3% at high school. Table 2 summarizes the demographic characteristics of our sample. Because the entire population was sampled at the grade levels included in our study, the sample demographics represent the district profile quite well, except for the sample only included assessments in English, the proportion of English language learners is lower in the sample than district population (see Table 2, Student Sample Demographics).

-----(Insert Table 2 here)-----

The assessments. Students in grade 3, 5, and 8 took writing assessments that were intended to test specific domains with several simultaneous underlying constructs. Table 3 summarizes the constructs by grade level and writing domain (also see the scoring guide Table 4, 5, and 6 in appendix).

Table 3
Constructs By Writing Domain

Grade	Writing Domain	Rhetorical Effectiveness Construct Measured	Knowledge	Conventions Constructs Measured
3	Autobiographical incident	Incidence	N/A	Spelling and Mechanics
		Context		
		Voice and style		
		Significance		
5	Observation	Identification of subject	N/A	Usage
		Context		
		Observational stance		
		Presentation of experience		
8	Speculation about causes and effect	Presentation of situation	Knowledge	
		Logic and relevance of causes		
		Elaboration of argument		

Chart 1 explains the relationship between the domain tested for grade 3, 5 and 8 and the constructs underlying the domains as reflected in the scoring guide.

--- (Insert Chart 1 here)---

Scoring. Teachers were released district wide for one day in late May to score student assessments and were asked at the end of the scoring day to summarize the learning issues they encountered in the papers. Teachers were assigned to rate papers at their own grade level and trained prior to rating on two scoring guides, one for Rhetorical Effectiveness and one for Conventions (see Appendix for copies of the scoring guides). The rater training consisted of one to two hours of guided rating and discussion managed by a district-trained and experienced Table Leader. The Table Leader discussed the prompt and scoring guide, had teachers write to the prompt (depending upon the experience of the group being trained), and facilitated the rating “anchor papers” (previously selected and scored papers that represent the score points in the Rhetorical Effectiveness and Conventions scoring guides). Each student received one score on

Rhetorical Effectiveness and one on Conventions. Scores were from 1 to 6, with 6 being the highest. Once the Table Leader was satisfied that the teachers reached consensus about the scoring guides, rating began. Papers from each of the districts 62 elementary and 21 middle schools were randomly assigned to tables of teachers. Teachers gave each paper a first read. During the first reading, Table Leaders “read behind” teachers and if a teacher was straying from the scoring guides, she was pulled aside for re-training. Papers were then collected and randomly assigned to another set of teacher raters for a second reading. Table Leaders checked the second reads. When scores were more than two points apart, the Table Leader gave the paper a third reading and that “expert” score became the score reported to the student.

Teachers assigned one score for Rhetorical Effectiveness and one for Conventions. In determining scores, teachers considered grade-level specific constructs defined by numerous dimensions. In the third grade writing domain of autobiographical incident, for example, rhetorical effectiveness was divided into four constructs: incidence, context, voice and style, and significance, and the conventions was divided into two constructs: usage, spelling and mechanics. The scoring guide directed teachers to evaluate incidence along 34 dimensions; context by 11 dimensions; voice and style by 18 dimensions and significance by 16 dimensions.

1) Grade 3 data

For grade 3, the domain tested is AUTOBIOGRAPHICAL INCIDENT. The two prompts used were **Form A: A Time I Learned How To Do Something**, and **Form B: A Time I Didn't Give Up**. The four underlying constructs to measure AUTOBIOGRAPHICAL INCIDENT are **incidence, context, voice and style, and significance**. According to the scoring guide, there are 34 dimensions to measure the construct of incidence.

----(Insert Chart 2 here)----

From the chart, we can assume that a score of 6 implying that a student has met the 11 dimensions (IQ1 to IQ11) developed according to the scoring guide. Likewise, for a score of 5, we can assume that a student has met the 4 dimensions (IQ12 to IQ15), and etc. Chart 3, 4, and 5 shows the dimensions indicating the construct of context, voice and style, and significance separately.

----(Insert Chart 3, 4, and 5 here)----

2) Grade 5 data

The domain tested for grade 5 is OBSERVATION. The two prompts used were: **Form A: A Rainy Day**, and **Form B: Watching an Animal**. The four underlying constructs to measure OBSERVATION are **identification of subject, context, observational stance, and presentation of the experience**. According to the scoring guide, there are 5 dimensions to measure the construct of identification of subject, 6 dimensions to measure context, 7 dimensions to measure the construct of observational stance, and 18 dimensions to measure presentation of the experience. For each score category from 1 to 6, there are corresponding dimensions developed to reflect if a student has met those dimensions. Chart 6, 7, 8 and 9 shows the dimensions indicating the 4 constructs

----(Insert chart 6, 7, and 8 here)----

3) Grade 8 data

SPECULATION ABOUT CAUSES AND EFFECT is the domain tested for grade 8. The two prompts used were **Form A: Lewis and Clark**, and **Form B: Overland Trails to the West**. The three constructs underlying to measure the domain were *presentation of the situation, logic and relevance of causes*, and *elaboration of argument*. Chart 10, 11, and 12 show there are 36 dimensions developed to measure the construct of presentation of the situation, 40 dimensions to measure logic and relevance of causes, and 31 dimensions to measure elaboration of argument.

-----(Insert chart 10, 11, and 12 here)-----

Analytical Procedure

Re-sampling. Each grade, approximately 5,000 to 6,000 students were involved in the assessments. We randomly sampled 3-4 % assessments from the entire database three times with replacement before we obtain all the parameter estimates for analysis.

Generalizability analysis. We employed generalizability theory (Cronbach, Cleser, Nanda, & Rajaratnam, 1972) to analyze the dependability of the assessments. Dependability usually refers to the accuracy of generalizing from a person's observed score on a test to the average score that person would have received under all the possible conditions that the test user would be equally willing to accept. The strength of G theory is that multiple sources of error can be estimated separately in a single analysis. We designed G study with two facets to focus on the variance components due to constructs comprising writing domains based on observed scores on rhetorical effectiveness and conventions, and the variance components due to constructs and rater interactions.

For grade 3, 5, and 8, we designed a (2x2) two facets fully crossed design, with two constructs (rhetorical effectiveness and conventions) and two raters. For grade 8, although knowledge was one of the constructs underlying the domain tested, we consider it a different construct from rhetorical effectiveness and conventions since it measures mastery of historical knowledge.

Table 4 shows the generalizability analysis design for grade 3 and 5, and 8.

Table 4: G Study Two Facets Fully Crossed Design for Grade 3, 5, and 8:

<u>Student</u>	<u>Rater</u>	<u>Rhetorical</u>	<u>Convention</u>
	1	score	score
	2	score	score

Results and Evidence

The estimates of variance components from separate sources of variation are shown in Tables 6, 7 and 8. For grade 3, the variance due to construct is 10%, and the variance due to the interaction between constructs and raters is around 7%. For grade 5, the variance due to construct is above 7% and the variance due to the interaction between constructs and raters amounts to around 20%. For grade 8, even larger proportion of variance due to constructs is observed to be around 48.49%. The variance due to the interaction between constructs and raters is around 2.18%. It is noticeable that the variance due to rater is very small.

G coefficients for each grade were derived to estimate the proportion of expected-score variance that is the universal score variance. For grade 3, the range of the G coefficients for samples A, B, and C were from .747 to .788; for grade 5, the range of the G coefficients for samples A, B, and C were from .677 to .763; for grade 8, the range of the G coefficients for samples A, B, and C were from .809 to .821. Except for the G coefficient for grade 5 sample B was a little lower, the rest of the G coefficients fall into acceptable range.

Table 6: Estimates of Variance Components for G Study Two Facets Fully Crossed Design

(Grade 3)

Source of Variation	Estimated Variance Components				Overall Average
	Sample A (N= 228)	Sample B (N=213)	Sample C (N=213)	Overall Average	
Student (Universal Score Variance)	0.9093	0.8948	0.8495	0.8845	48.38%
Construct	0.2049	0.3148	0.0570	0.1928	10.54%
Rater	0.00048	0.0002	0.001	0.0005	0.27%
Construct*Rater	0.014	0.014	0.365	0.13	7.1%
Student*Construct	0.15	0.1475	0.163	0.1531	8.37%
Student*Rater	0.25	0.277	0.318	0.28	15.31%
Student*Rater*Construct	0.181	0.189	0.192	0.1873	10.24%
Total Variance	1.70968	1.8373	1.9455	1.8282	100%
G Coefficient	0.788	0.775	0.747		

Table 7: Estimates of Variance Components for G Study Two Facets Fully Crossed Design

(Grade 5)

Source of Variation	Estimated Variance Components				Overall Average
	Sample A (N= 227)	Sample B (N=231)	Sample C (N=224)	Overall Average	
Student (Universal Score Variance)	0.7175	0.5450	0.5760	0.61	36.9%
Construct	0.1130	0.0520	0.1923	0.12	7.26%
Rater	0.002	0.004	0.001	0.003	0.18%
Construct*Rater	0.12	0.46	0.45	0.34	20.6%
Student*Construct	0.18	0.20	0.15	0.18	10.89%
Student*Rater	0.18	0.22	0.23	0.21	12.7%
Student*Rater*Construct	0.17	0.204	0.185	0.19	11.49%
Total Variance	1.4825	1.685	1.7843	1.653	100%
G Coefficient	0.763	0.677	0.709		

Table 8: Estimates of Variance Components for G Study Two Facets Fully Crossed Design**(Grade 8)**

Source of Variation	Estimated Variance Components				
	Sample A (N=235)	Sample B (N=235)	Sample C (N=242)	Overall Average	
Student (Universal Score Variance)	1.0039	.9854	0.9388	0.976	32.3%
Construct	0.0668	0.0956	4.2341	1.465	48.49%
Rater	0.001	0.002	0.000	0.001	0%
Construct*Rater	0.026	0.019	0.154	0.066	2.18%
Student*Construct	0.092	0.132	0.138	0.12	3.92%
Student*Rater	0.270	0.257	0.204	0.244	8.1%
Student*Rater*Construct	0.150	0.153	0.142	0.148	4.9%
Total Variance	1.6079	1.644	5.8109	3.021	100%
G Coefficient	0.821	0.809	0.820		

Discussions

The data used for this analysis contains only one writing task for each student. Not only it is inappropriate, but also impossible to assess the reliability or dependability of this assessment within traditional reliability analytical framework. However, the assessments were designed focusing on the constructs underlying domains tested. Meanwhile, scoring guides were developed centering the constructs comprised of dimensions for raters to consider. Raters were trained to follow the construct-centered-scoring guide. To assess the dependability of the assessments involved, by incorporating contextual information provided in the scoring guide, we were able to decompose the one complex writing task into a number of smaller constructs, which were comprised more homogeneous dimensions. The rationale guiding the approach centered focus on the constructs that were intended to be measured by the domain tested. Thus, we differentiate this approach from traditional reliability analytical approach.

Looking at the results of generalizability analysis obtained using grade 3, 5 and 8 data, we found that high generalizability or reliability is achievable using construct centered reliability analytical approach where there is a high degree of fit between the substantive expectations generated from the test specialist's understanding of the construct-as realized by the measurement procedure-and observation (Nichols and Smith, 1998).

Educational or Scientific Importance of Study:

Instead of increasing number of writing prompts or writing tasks per student, we incorporated contextual information when we performed generalizability analysis by centering our focus on underlying constructs of domain tested, thus defining more variance systematically. The evidence from this study support the need for reliability studies to incorporate theories of learning and performance and that this incorporation has practical implications for the use of different assessment practices. Test developers have an obligation to accommodate different sets of substantive assumptions into the evaluation of measurement procedure's reliability (Nichols & Smith, 1998). The construct centered reliability analytical model serves an alternative to the traditional reliability analytical model when assessing the dependability of cognitively complex

task. This study provides an empirical example of a framework for contextualizing the interpretation of reliability data, which is critical to validate performance assessment.

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Appendix

TABLE 2: Demographic Characteristics of Students Tested in English for Grade 3, 5 and 8

Grade	Gender					Ethnicity			English Language Fluency			Free/Reduced Lunch			Total N
	Male	Female	Asian	African American	Hispanic	American Indian	Pacific Islander	White	English Only	Fluent English Proficiency	English Language Learner	Full Price	Reduced Price	Free	
3	51.2%	48.8%	15.7%	26.7%	4.0%	26.5%	0.3%	3.0%	23.9%	64.2%	7.7%	28.1%	34.4%	58.0%	5488
5	51.1%	48.9%	14.8%	23.4%	3.0%	35.7%	0.5%	2.3%	20.4%	54.5%	17.6%	27.9%	31.4%	60.0%	6009
8	50.7%	49.3%	17.2%	20.9%	3.7%	36.2%	0.4%	2.1%	19.6%	50.0%	25.0%	25.0%	32.7%	59.9%	5833

TABLE 4: Constructs Intended To Be Measured and Dimensions Within the Constructs By Grade 3 Writing Prompts

Constructs	Dimension Index	Dimension Descriptions	Dimension Descriptions						
			6	5	4	3	2	1	
	IQ1	Coherent and engaging story	x						
	IQ2	Moves toward central moment with drama	x						
	IQ3	Tells readers what they need to know to understand what happened	x						
	IQ4	Readers can infer the incident's significance to the writer	x						
	IQ5	Sensory descriptions	x						
	IQ6	Narrating specific action	x						
	IQ7	Creating dialogues	x						
	IQ8	Slowing the pace to elaborate central moment in the incident	x						
	IQ9	Creating suspense or tension	x						
	IQ10	Including the element of surprise	x						
	IQ11	Comparing or contrasting other scenes or people	x						
	IQ12	Less drama than a "G"	x						
Incidence	IQ13	Structurally more predictable than a "G"	x						
	IQ14	Less focused, especially toward the end	x						
	IQ15	Uses a narrower range of narrative strategies	x						
	IQ16	Lacks the authority of a "G"	x						
	IQ17	May be momentary digressions	x						
	IQ18	Story may be smoothly told yet unrealized dramatically.	x						
	IQ19	Limited use of narrative strategies	x						
	IQ20	Related specific incident	x						
	IQ21	Story competently told	x						
	IQ22	Brief	x						
	IQ23	Flat, unfocused	x						
	IQ24	May be series of loosely connected events	x						
	IQ25	Very limited use of narrative strategies	x						
	IQ26	May fail to focus on an incident	x						
	IQ27	Incohesion. May tell an incident without orienting context or significance	x						
	IQ28	Usually quite brief	x						
	IQ29	If longer, may be rambling, fragmentary, or without details.	x						
	IQ30	Contains omissions, erratic jumps in time or place, or breakdowns	x						
	IQ31	May refer to an incident without identifying it specifically	x						
	IQ32	May only imply the incident	x						
	IQ33	May point to an incident without developing it conclusively	x						
	IQ34	Writer may focus on others instead of himself	x						
Context	CQ1	Writer locates incident in a particular setting and orients reader to scene, people and events	x						
	CQ2	Carefully chosen details used to develop the scene or the people	x						
	CQ3	Considerable space devoted to orienting readers, describing the scene and people, and providing back-ground or context for the incident but not at the expense of a well-told incident	x						
	CQ4	Balance achieved between static context and dramatic narrated incident	x						
	CQ5	Appropriate and adequate context as in a 6-point essay	x						
	CQ6	Context does not dominate at the expense of the incident	x						
	CQ7	Adequate to orient readers to the incident	x						
	CQ8	May devote too much space to context while neglecting the narrative	x						
	CQ9	May begin abruptly without necessary orientation	x						
	CQ10	Context is limited or even missing (1)	x						
	CQ11	Context is limited or even missing (2)	x						

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Constructs	Dimension Index	Dimension Descriptions	6	5	4	3	2	1
VQ1		Authentic voice	x					
VQ2		Reveals writer's attitude toward the incident	x					
VQ3		Well chosen details	x					
VQ4		Appropriate words	x					
VQ5		Graceful, varied sentences	x					
VQ6		Often includes word play and imagery	x					
VQ7		Engages the reader from the beginning and moves to a satisfying closure	x					
VQ8		Competent stylistically	x					
VQ9		May lack the grace, surprise, or sparkle of a "g"	x					
VQ10		Begins engagingly and closes in a satisfying way	x					
VQ11		The voice of an earnest story-teller	x					
VQ12		Predictable sentences and word choice	x					
VQ13		Writer relates incident in an uninvolved way	x					
VQ14		Writer does not seem to be seeing the incident as it happened	x					
VQ15		Minimal evidence of personal involvement	x					
VQ16		Writer does not seem to be relating specific details about the incident	x					
VQ17		Sentences may be too short or long in a disorderly way	x					
VQ18		Writer communicates little or no evidence or personal involvement in the incidence	x					
SQ1		Reveals by statement of implication, why the incident was important to the writer	x					
SQ2		Significance may be apparent in the writer's insights at the time of the incident or in reflections from his/her present perspective.	x					
SQ3		Insights/reflections may appear integrated into the narration or in the conclusion	x					
SQ4		Reflections may be humorous	x	-				
SQ5		Significance either implied or stated clearly, through remembered or present reflections	x					
SQ6		Reflections not as perceptive as 6-point essay, but not superficial	x					
SQ7		Less well integrated as 6-point essay; often at end of essay	x					
SQ8		Either implied or stated	x					
SQ9		Reflection not as insightful as 5-point essay	x					
SQ10		Reflection may seem lacked on at the end of the essay	x					
SQ11		Implied or briefly stated	x					
SQ12		Gives readers an idea why the incident was memorable	x					
SQ13		Reflections not especially insightful	x					
SQ14		Few, if any, reflections	x					
SQ15		Reflections may seem superficial	x					
SQ16		Little or no significance implied or stated	x					

TABLE 5: Constructs Intended To Be Measured and Dimensions Within the Constructs By Grade 8 Writing Prompts

Constructs	Dimension Index	Dimension Descriptions	6 5 4 3 2 1						
			6	5	4	3	2	1	
PQ1		Clearly defines, identifies or describes the situation to be speculated about	x						
PQ2		Situation is presented fully and precisely, but does not dominate the essay at the expense of speculation	x						
PQ3		Writer limits the occasion appropriately; readers' attention is focused on just those aspects the writer will speculate about	x						
PQ4		The presentation of the situation grounds and focuses the entire essay	x						
PQ5		Reader is immediately engaged	x						
PQ6		Language is concrete, rich in sensory detail	x						
PQ7		Writer uses narrative and descriptive strategies	x						
PQ8		Writer acknowledges readers' concerns/questions.	x						
PQ9		Writer convinces readers of the plausibility of the speculation.	x						
PQ10		For realworld situations, the writer acknowledges reader's experience or familiarity with a situation, then builds on this to focus reader attention on a comparable situation	x						
PQ11		Writer establishes authority by consistently demonstrating broad knowledge and clear understanding of the situation	x						
PQ12		Situation is clearly defined, but with less elaboration than a "G"	x						
PQ13		Situation does not dominate the essay at the expense of speculation	x						
PQ14		Writer limits and focuses the occasion, but with less panache than a "G"	x						
PQ15		Writer's knowledge and understanding of the situation is clear throughout, and a sense of confidence and authority is maintained	x						
PQ16		Language lacks only the vividness and impact of a "G"	x						
PQ17		Relies on a narrower range of strategies for presenting the situation than a "G"	x						
PQ18		Situation presented with less assurance than a "G" or "G"	x						
PQ19		Situation may tend to dominate the essay	x						
PQ20		Not as clearly focused, or may lack detail or specificity or a "G" or "G"	x						
PQ21		The presentation of the situation is adequate to orient readers to the proposed causes or effects	x						
PQ22		Essay contains some explicit speculation	x						
PQ23		Writing presents a situation	x						
PQ24		Situation may either be brief or may dominate the essay	x						
PQ25		Writer may paraphrase the prompt rather than define the situation	x						
PQ26		Writer may not clearly establish the boundaries of the situation	x						
PQ27		Writer may not seem to fully understand the situation	x						
PQ28		Commonplace language	x						
PQ29		Limited use of strategies	x						
PQ30		Writer may not acknowledge readers	x						
PQ31		Writer may attempt to construct a situation but, because of omissions, erratic jumps in time or place or breakdowns in cohesion, will not establish focus.	x						
PQ32		Situation may dominate the essay	x						
PQ33		Essay may include no occasion, beginning abruptly with a list of causes or effects	x						
PQ34		Writer exhibits only minimal understanding of the situation	x						
PQ35		If there is a situation, it will be very brief and devoid of specificity or concreteness	x						
PQ36		Essay may point vaguely to a situation without focusing or establishing boundaries	x						

TABLE 5

Constructs	Dimension Index	Dimension Descriptions	6	5	4	3	2	1
LQ1		Proposes causes and effects are clearly related to the situation	x					
LQ2		Writer uses imaginative, investigative, inventive arguments to convince readers of the logic of the speculations	x					
LQ3		Multiple perspectives/possibilities are considered	x					
LQ4		Writer stretches imagination to take ideas as far as possible, are convinced that the writer's speculations are plausible and appropriate to the situations as defined	x					
LQ5		Writer maintains focus by establishing and continually developing the close relationship between the particular situation and the causes/effects that might arise from it	x	x				
LQ6		Writer is continually aware of reader's needs	x	x				
LQ7		Writer may employ some of the following strategies:						
LQ8		Building a succession of causes of effects, each changing the complex:	x	x				
LQ9		Writer establishes, maintains, and developing a plausible relationship between the situation and each of the processed causes or effects	x	x				
LQ10		The speculation is naturally linked to the situation.	x					
LQ11		Transitions skillfully keep the reader grounded both in the relationship between the situation and the proposed causes and effects and in the logical development and progression of the speculation itself	x					
LQ12		Writer uses the transitions to carry the reader along with the methodological development of the argument	x					
LQ13		Writer weaves together facts, opinions & projections to create and develop convincing reasons	x					
LQ14		Proposed causes or effects are linked naturally to the defined situation	x					
LQ15		Writer conjectures persuasively for possible causes or effects	x					
LQ16		Speculations are serious and logical, lacking only the freshness and imagination of a "g".	x					
LQ17		Obviously statements about probable causes and effects to speculations that are not entirely predictable.	x					
LQ18		Essay may lack the clarity of focus, the continuity, or the growing insight and fullness of a "g".	x					
LQ19		Writer has a consistent awareness of audience	x					
LQ20		Speculations are insightful, but not as probing as a "g"	x					
LQ21		Writer keeps the reader grounded in both situation and the speculation and the speculation, although not as consistently as a "g"	x					
LQ22		Writer establishes a connection between the situation and the postulated causes or effects, but may not maintain this connection as explicitly or effectively as "5" or "6".	x					
LQ23		Speculations characterized by thoughtfulness rather than inventiveness	x					
LQ24		Proposed causes or effects may be logical but predictable	x					
LQ25		Speculations may be connected	x					
LQ26		Acknowledgment of readers not as evident as in a "5" or "6"	x					
LQ27		Speculations are at least tangentially relevant.	x					
LQ28		Writer may tend to list a series of causes or effects rather than develop them or ground them in the situation.	x					
LQ29		Little effort to convince the reader by developing a logical cause-effect relationship.	x					
LQ30		Speculations may seem obvious, superficial, or predictable.	x					
LQ31		Proposed causes/effects arise from or are appropriate to the situation, but may seem tangential and not grounded as firmly in the situations.	x					
LQ32		Little conscious awareness of the reader.	x					
LQ33		Essay may have a meandering quality	x					
LQ34		May be only one minimally developed cause/effect	x					
LQ35		If there is a situation, the speculations may be either brief or meandering/unfocused	x					
LQ36		Little evidence of any logical organization	x					
LQ37		Some of the proposed causes/effects may seem illogical or unrelated to the situation	x					
LQ38		Little connection between the situation and the speculations	x					
LQ39		If there are speculations, they are brief and superficial attempts at prediction rather than considered exploration of possibilities	x					
LQ40		No evidence of a logical connection between the situation and the causes or effects.	x					

TABLE 5

<i>Constructs</i>	<i>Dimension Index</i>	<i>Dimension Descriptions</i>	6	5	4	3	2	1
	EQ1	Essay provides substantial elaboration.	x					
	EQ2	Reader is convinced that the writer's conjectures are valid for the situations	x					
	EQ3	Writer uses carefully chosen evidence that is logically and fully developed.	x					
	EQ4	Reader is convinced of both the logic and the authenticity of the proposed cause/effect.	x					
	EQ5	Strategies used to develop arguments:	x					
	EQ6	Writer may mention several causes/effects, developing and linking them.	x					
	EQ7	Writer may only mention one cause/effect, building it fully and examining it closely from a variety perspectives.	x					
	EQ8	Writer makes a full and convincing argument for at least one postulated cause and one postulated effect.	x					
	EQ9	Writer engages in extended, thoughtful speculation	x					
	EQ10	Writer uses effective arguments to convince the reader of the logic and validity of the speculations.	x					
	EQ11	Writer chooses evidence that is relevant and convincing.	x					
	EQ12	Supporting evidence is more predictable than a "6".	x					
	EQ13	Supporting details are relevant and convincing, not as richly developed as a "6".	x					
	EQ14	Writer offers less persuasive evidence for the validity of the proposed causes/effects...	x					
	EQ15	Essay exhibits some internal logic and an over-all sense of organization.	x					
	EQ16	Essay may not show a consistent relationship between the situation and cause/effects.	x					
<i>Elaboration of argument</i>	EQ17	May be some irrelevant details.	x					
	EQ18	Elaboration is limited - perhaps to a brief explanation of one cause/effect or a listing of several with minimal development.	x					
	EQ19	Essay lacks consistency of development of details.	x					
	EQ20	Sequences and organizational pattern seem unclear.	x					
	EQ21	Essay may seem generally competent and the speculations interesting	x					
	EQ22	Little elaboration, often merely listing.	x					
	EQ23	Essay often brief.	x					
	EQ24	Little development either of the situation or of cause/effects.	x					
	EQ25	May be extended generalized rambling.	x					
	EQ26	May merely list causes/effects without support of argument.	x					
	EQ27	Some details may be irrelevant and unconnected to either the speculations or the situation; Essay contains little or no argument or effort to persuade the reader.	x					
	EQ28	Little or no elaboration of either the situation or of the causes/effects.	x					
	EQ29	Speculations, if presented at all, are not argued.	x					
	EQ30	Rarely is there any sense of the reader.	x					
	EQ31	Essay is brief; Essay is often not coherent.	x					

TABLE 6

TABLE 6: Constructs Intended To Be Measured and Dimensions Within the Constructs By Grade 5 Writing Prompts

Constructs	Dimension Index	Dimension Descriptions							6	5	4	3	2	1
		1	2	3	4	5	6	7						
Identification of subject	IQ1	Clearly defined or identified			x	x								
	IQ2	Clearly identified but rarely defined		x										
	IQ3	The subject is identified, but in a very general rather than specific way		x										
	IQ4	More than one subject may be introduced		x										
	IQ5	May or may not indicate a subject or subjects	x											
	CQ1	Clearly located in a specific physical or psychological context	x											
Context	CQ2	Located in a specific physical context	x											
	CQ3	Located in a context, but the context may either be very scant, or may dominate the essay at the expense of the subject	x											
	CQ4	The subject is located in a context, but may either be very minimal, or it may dominate the essay at the expense of the subject	x											
	CQ5	The context is minimal; when there are multiple subjects, context may be completely lacking	x											
	CQ6	No context is provided	x											
	OQ1	The writer's role as observer, rather than active participants, is clearly established. This relationship between the writer as eyewitness and the subject is developed, and maintained throughout the essay.	x											
Observational stance	OQ2	The writer conveys a sense of discovery that has resulted from his/her observations	x											
	OQ3	The relationship between the writer as eyewitness and the subject is well established	x											
	OQ4	The relationship between the writer and the subject is less clear than in five and six-point essays	x											
	OQ5	The relationship between the writer and the subject is inconsistent or may tend to be autobiographical rather than observational	x											
	OQ6	The observer is central, often evaluative, and the writing is autobiographical	x											
	OQ7	The observer is central, the subject, when discernible, may be mentioned only once or twice	x											
Presentation of the experience	PQ1	Writing is rich in sensory detail and concrete images	x											
	PQ2	The reader can recognize the meaning, impact, and importance that the experience had for the writer	x											
	PQ3	The writer skillfully uses a variety of presentational strategies such as dialogue or monologue, narration, specific action/behavior, shifting perspectives, and/or metaphoric language to recreate his/her perception for the reader	x											
	PQ4	Throughout the essay, the writer exhibits a controlled awareness of the scene itself, of his/her own purpose, and of the developing effect of the essay on the reader	x											
	PQ5	Provides sufficient detail for the reader to see the scene clearly	x											
	PQ6	Recognize the meaning and importance that the experience had for the writer	x											
Presentation of the experience	PQ7	The writer uses a number of presentational strategies, but fewer or less effectively than a six-point essay	x											
	PQ8	Throughout the essay, the writer exhibits a fairly well controlled awareness of the scene itself, of his/her own purposes, and of the developing effect of the essay on the reader	x											
	PQ9	Provides some detail, but it is often skimpy and/or unlaborated	x											
	PQ10	May not convey the meaning or importance for the writer	x											
	PQ11	The writer uses several prelational strategies, but with little elaboration	x											
	PQ12	The writer shows little awareness of the reader	x											
Presentation of the experience	PQ13	Writing is characterized by generalities rather than specific details	x											
	PQ14	Does not convey the meaning or importance of the experience	x											
	PQ15	The writer uses very few presentational strategies	x											
	PQ16	The writer rarely shows awareness of the reader	x											
	PQ17	Information about the subject is garbled or lacking	x											
	PQ18	The writer shows no awareness of the reader	x											

Summary of Rhetorical Effectiveness Scoring Guide for
AUTOBIOGRAPHICAL INCIDENT

INCIDENT		Rhetorical Effectiveness				Context
		1	2	3	4	
6	<ul style="list-style-type: none"> • Coherent and engaging story. • Moves toward central moment with drama. • Tells readers what they need to know to understand what happened. • Readers can infer the incident's significance to the writer. • Uses some of the following narrative strategies: • sensory descriptions • narrating specific action • creating dialogues, interior monologues • slowing the pace to elaborate central moment in the incident • creating suspense or tension • including the element of surprise • comparing or contrasting other scenes or people 	<ul style="list-style-type: none"> • Lacks the authority of a "5." • May be momentary digressions • Story may be smoothly told yet uneventfully • Limited use of narrative strategies. 	<ul style="list-style-type: none"> • Relates specific incident. • Story competently told. • Brief. • Flat, unfocused. • May be series of loosely connected events. • Very limited use of narrative strategies. 	<ul style="list-style-type: none"> • May refer to an incident without identifying it specifically. • May only imply the incident. • May point to an incident without developing it conclusively. • Writer may focus on others instead of himself. 	<ul style="list-style-type: none"> • May fail to focus on an incident. • In cohesion. May tell an incident without orienting context or significance. • Usually quite brief. • If longer, may be rambling, fragmentary, or without details. • Contains omissions, erratic jumps in time or place, or breakdowns. 	1
5	<ul style="list-style-type: none"> • Less drama than a "6." • Structurally more predictable than a "6." • Less focused, especially toward the end. • Uses a narrower range of narrative strategies. 	<ul style="list-style-type: none"> • May be momentary digressions • Story may be dramatically told yet uneventfully • Limited use of narrative strategies. 	<ul style="list-style-type: none"> • Relates specific incident. • Story competently told. • Brief. • Flat, unfocused. • May be series of loosely connected events. • Very limited use of narrative strategies. 	<ul style="list-style-type: none"> • May refer to an incident without identifying it specifically. • May only imply the incident. • May point to an incident without developing it conclusively. • Writer may focus on others instead of himself. 	<ul style="list-style-type: none"> • May fail to focus on an incident. • In cohesion. May tell an incident without orienting context or significance. • Usually quite brief. • If longer, may be rambling, fragmentary, or without details. • Contains omissions, erratic jumps in time or place, or breakdowns. 	2
4						3

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Summary of Rhetorical Effectiveness Scoring Guide for
AUTOBIOGRAPHICAL INCIDENT (Continued)

	VOICE AND STYLE	6	5	4	3	2	1	Rhetorical Effectiveness Score	
								Score	Description
SIGNIFICANCE	<ul style="list-style-type: none"> Authentic voice. Reveals writer's attitude toward the incident. Well chosen details. Appropriate words. Graceful, varied sentences. Often includes word play and imagery. Engages the reader from the beginning and moves to a satisfying closure. 	<ul style="list-style-type: none"> • Authentic • nice • Competent • stylistically • May lack the grace, surprise, or sparkle of a "6." • Begins engagingly and closes in a satisfying way. 	<ul style="list-style-type: none"> The voice of an earnest story-teller. Predictable sentences and word voice. 	<ul style="list-style-type: none"> Writer relates incident in an uninvolved way. Writer does not seem to be seeing the incident as it happened. Predictable sentences and word choice. 	<ul style="list-style-type: none"> Writer relates incident in an uninvolved way. Writer does not seem to be relating specific details about the incident. Sentences may be too short or long in a disorderly way. 	<ul style="list-style-type: none"> Minimal evidence of personal involvement. Writer does not seem to be relating specific details about the incident. Sentences may be too short or long in a disorderly way. 	<ul style="list-style-type: none"> Writer communicates little or no evidence of personal involvement in the incident. 	1	Writer communicates little or no evidence of personal involvement in the incident.

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Summary of Rhetorical Effectiveness Scoring Guide for OBSERVATIONAL WRITING

	6	5	4	3	2	1
• IDENTIFICATION OF SUBJECT	• Clearly defined or identified.	• Clearly defined or identified.	• Clearly identified but rarely defined.	• The subject is identified, but in a very general rather than specific way.	• More than one subject may be introduced.	• May or may not indicate a subject or subjects.
• CONTEXT	• Clearly located in a specific physical or psychological context.	• Located in a specific physical context.	• Located in a context, but the context may either be very scant, or may dominate the essay at the expense of the subject.	• The subject is located in a context, but may either be very minimal, or it may dominate the essay at the expense of the subject.	• Context is minimal; when there are multiple subjects, context may be completely lacking.	• No context is provided.
• OBSERVATIONAL STANCE	• The writer's role as observer, rather than active participant, is clearly established. This relationship between the writer as eyewitness and the subject is well established.	• The relationship between the writer as eyewitness and the subject is well established.	• The relationship between the writer and the subject is less clear than in five and six-point essays.	• The relationship between the writer and the subject is inconsistent or may tend to be autobiographical rather than observational.	• The observer is central, often evocative, and writing is autobiographical.	• The observer is central. The subject, when discernible, may be mentioned only once or twice.
• PRESENTATION OF THE EXPERIENCE	• Writing is rich in sensory detail and concrete images.	• Provides sufficient detail for the reader to see the scene clearly.	• Provides some detail, but it is often skimpy and/or unelaborated.	• Writing is characterized by generalities rather than specific details.	• Writing is characterized by generalities rather than specific details.	• Information about the subject is garbled or lacking.
	• The reader can recognize the meaning, impact, and importance that the experience had for the writer.	• The reader can recognize the meaning and importance that the experience had for the writer.	• May not convey the meaning or importance for the writer.	• Does not convey the meaning or importance of the experience.	• Does not convey the meaning or importance of the experience.	• The writer shows no awareness of the reader.
	• The writer skillfully uses a variety of presentational strategies such as dialogue or monologue, narration, specific actions/behavior, shifting perspectives, and/or metaphoric language to recreate his/her perception for the reader.	• The writer uses a number of presentational strategies, but with little elaboration.	• The writer uses several presentational strategies, but with little elaboration.	• The writer uses very few presentational strategies.	• The writer uses very few presentational strategies.	• The writer rarely shows awareness of the reader.
	• Throughout the essay, the writer exhibits a controlled awareness of the scene itself, of his/her own purposes, and of the developing effect of the essay on the reader.	• The writer shows little awareness of the reader.	• The writer shows little awareness of the reader.	• The writer shows little awareness of the reader.	• The writer shows little awareness of the reader.	• The writer shows no awareness of the reader.

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**Summary of Rhetorical Effectiveness Scoring Guide for
SPECULATION ABOUT CAUSES AND EFFECTS/HISTORY ASSESSMENT**

PRESENTING THE SITUATION	LOGIC AND RELEVANCE OF CAUSES	1	2	3	4	5	6
		• If there is a situation, it will be very brief and devoid of specificity or concreteness.	• Writer may attempt to construct a situation but, because of omissions, erratic jumps in time or place, or breakdowns in cohesion, will not establish focus.	• Writing presents a situation.	• Situation may either be brief or may dominate the essay.	• Not as clearly focused, or may lack detail or specificity of a "5" or "6".	• Situation does not dominate the essay at the expense of specification.
		• Essay may point vaguely to a situation without focusing or establishing boundaries.	• Essay may include no occasion, beginning abruptly with a list of causes or effects.	• Writer exhibits only minimal understanding of the situation.	• Writer may paraphrase the prompt rather than define the situation.	• The presentation of the situation is adequate to orient readers to the proposed causes or effects.	• Writer limits the occasion appropriately; readers' attention is focused on just those aspects the writer will speculate about.
		• Writer exhibits only minimal understanding of the situation.	• Writer may not clearly establish the boundaries of the situation.	• Writer may not seem to fully understand the situation.	• Writer may not acknowledge readers.	• Writer's knowledge and understanding of the situation is clear throughout, and a sense of confidence and authority is maintained.	• Writer uses narrative and descriptive strategies.
		• No evidence of a logical connection between the situation and the causes or effects.	• Limited use of strategies.	• Commonplace language.	• Writer may not acknowledge readers.	• Language lacks only the vividness and impact of a "6".	• Writer asks questions, concerns/questions, readers of the plausibility of the speculation.
		• Writer may tend to list a series of causes or effects rather than develop them or ground them in the situation.	• Writer may not maintain this connection as explicitly or effectively as a "5" or "6".	• Speculations are at least tangentially relevant.	• Writer may tend to list a series of causes or effects rather than develop them or ground them in the situation.	• Writer establishes authority by consistently demonstrating broad knowledge and clear understanding of the situation.	• Writer convinces readers of the writer's experience or familiarity with a situation, then builds on this to focus reader's attention on a comparable situation.
		• Writer may not seem grounded as firmly in the situations.	• Little effort to convince the reader by developing a logical cause-effect relationship.	• Speculations are characterized by thoughtfulness rather than inventiveness.	• Writer may tend to list a series of causes or effects rather than develop them or ground them in the situation.	• Writer establishes that the writer's speculations are plausible and appropriate to the situation.	• Writer uses imagination, inventive arguments to convince readers of the logic of the speculations.
		• Little conscious awareness of the reader.	• Proposed causes/effects arise from or are appropriate to the situation, but may seem tangential and not predictable.	• Speculations are serious and logical, lacking only the freshness and imagination of a "6".	• Writer may lack the clarity of focus, the continuity, or the growing insight and obvious statements about probable causes and effects to speculate that are not entirely predictable.	• Writer reaches beyond obvious statements about probable causes and effects to speculate that are not entirely predictable.	• Writer maintains focus by establishing and continually developing the close relationship between the particular situation and the causes/effects that might arise from it.
		• May be only one minimally developed cause/effect.	• Writer may employ some of the following strategies:	• Speculations are serious and logical, lacking only the freshness and imagination of a "6".	• Writer may lack the clarity of focus, the continuity, or the growing insight and obvious statements about probable causes and effects to speculate that are not entirely predictable.	• Writer is continually aware of reader's needs.	• "How did" or "if then" patterns of thinking to pose causes and effects and to show the relationship between these conjectures and the situation.
		• May be only one minimally developed cause/effect.	• "How did" or "if then" patterns of thinking to pose causes and effects and to show the relationship between these conjectures and the situation.	• Writer has a consistent awareness of audience.	• Building a succession of causes or effects, each changing the complex.	• Writer is continually aware of reader's needs.	• Showing direct and logical connection between the speculated cause or effect and the situation; how the causes logically create the situation or how the effects arise as a natural consequence of it.

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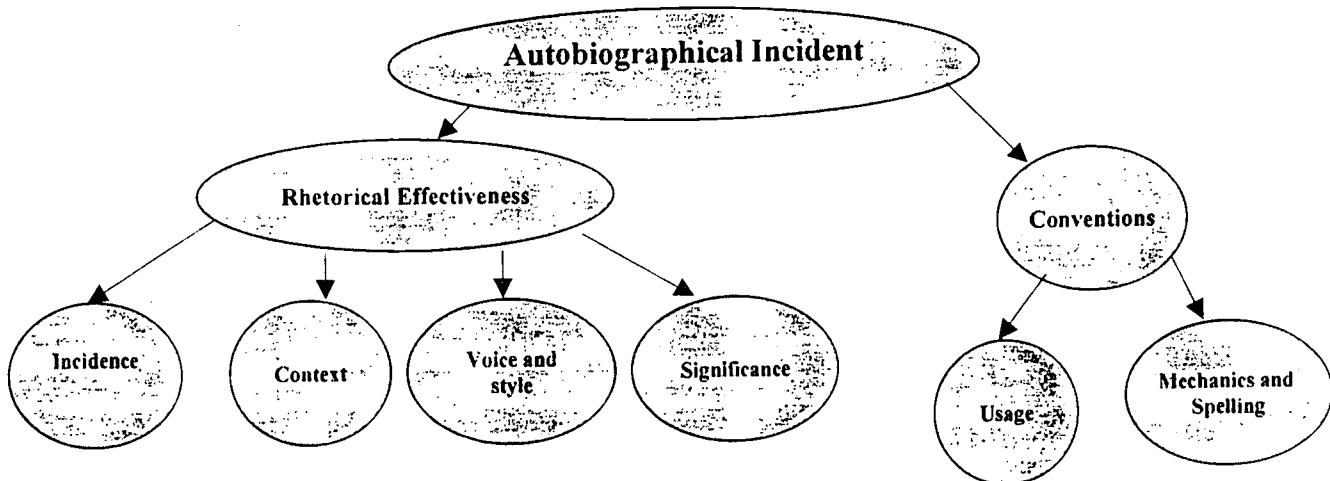
Summary of Rhetorical Effectiveness Scoring Guide for
SPECULATION ABOUT CAUSES AND EFFECTS/HISTORY ASSESSMENT
(Continued)

	1	2	3	4	5	6	
LOGIC AND RELEVANCE OF CAUSES (Continued)	<ul style="list-style-type: none"> -Controlling organizational sequences, such as movement from least to most important cause or effect: from small to large issues; from concrete to abstract; from personal to societal causes or effects. Writer establishes, maintains, and develops a plausible relationship between the situation and each of the proposed causes or effects. The speculation is naturally linked to the situation. Transitions skillfully keep the reader grounded both in the relationship between the situation and the proposed causes and effects and in the logical development and progression of the speculation itself. Writer uses the transitions to carry the reader along with the methodological development of the argument. Writer weaves together facts, opinions & projections to create and develop convincing reasons. 	<ul style="list-style-type: none"> Little connection between the situation and the speculations. 	<ul style="list-style-type: none"> Elaboration is limited - perhaps to a brief explanation of one cause/effect or a listing of several with minimal development. 	<ul style="list-style-type: none"> Writer offers less persuasive evidence for the validity of the proposed causes/effects. Essay exhibits some internal logic and an over-all sense of organization. Essay may not show a consistent relationship between the situation and causes/effects. 	<ul style="list-style-type: none"> Writer engages in extended, thoughtful speculation. Writer uses effective arguments to convince the reader of the logic and validity of the speculations. Writer chooses evidence that is relevant and convincing. Supporting evidence is more predictable than a "G". 	<ul style="list-style-type: none"> Supporting details are relevant and convincing; not as richly developed as a "G". (Elaborating on possibilities arising from proposed cause/effects, showing possible "Domino effects" that might determine the direction of a developing situation. Giving specific examples of comparable causes or effects that might have arisen in analogous situations. Writer may mention several possible causes/effects, developing and linking them. Writer may only mention one cause/effect, building it fully and examining it closely from a variety of perspectives. Writer makes a full and convincing argument for at least one postulated cause and one postulated effect. 	<ul style="list-style-type: none"> Little or no elaboration of either the situation or of the causes/effects. Speculations, if presented at all, are not argued.
ELABORATION OF ARGUMENT	<ul style="list-style-type: none"> Essay provides substantial elaboration. Reader is convinced that the writer's conjectures are valid for the situation. Writer uses carefully chosen evidence that is logically and fully developed. Reader is convinced of both the logic and the authenticity of the proposed cause/effect. Strategies used to develop arguments, including facts, opinions, projections, and personal experiences or observations (anecdotes) to explain or validate a cause or effect. 	<ul style="list-style-type: none"> Elaboration is often brief. Essay often brief. Little development either of the situation or of causes/effects. May be extended. Generalized rambling. May merely list causes/effects without support of argument. 	<ul style="list-style-type: none"> Writer lacks consistency of development of details. Sequence and organizational pattern seem unclear. Essay may seem generally competent and the speculations interesting. 	<ul style="list-style-type: none"> Some details may be irrelevant and unconnected to either the situation or the speculations on the reader. Essay is often not coherent. 	<ul style="list-style-type: none"> Rarely is there any sense of the reader. Essay is brief. Essay is often not coherent. 		

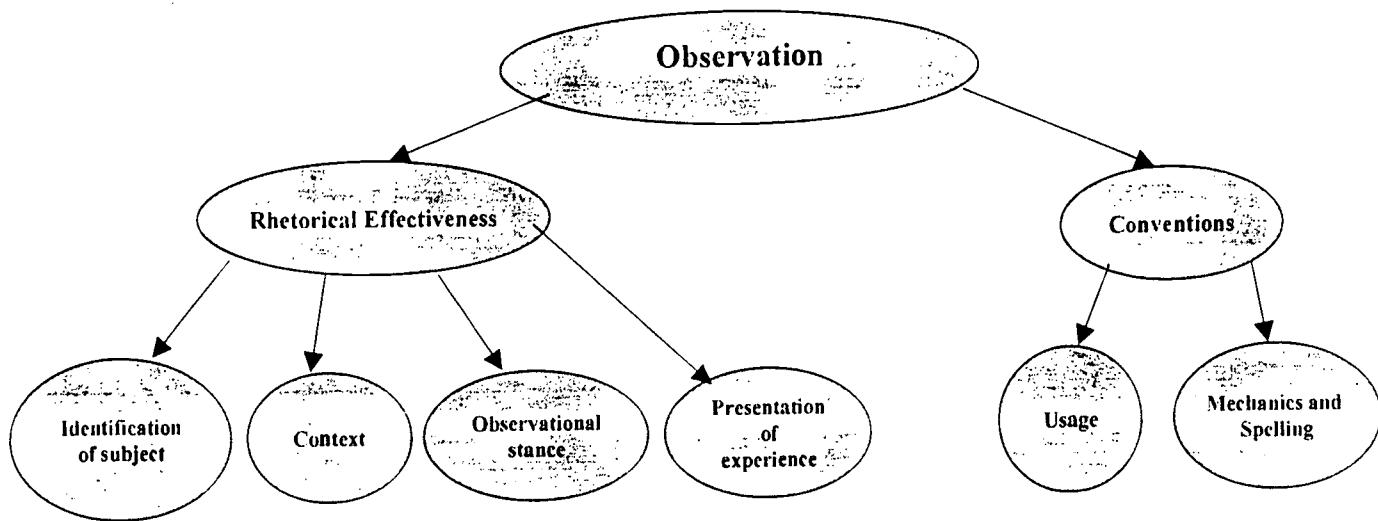
Chart 1

Relationship between Domain Tested and the Underlying Constructs

Grade 3 Domain Tested:



Grade 5 Domain Tested:



Grade 8 Domain Tested:

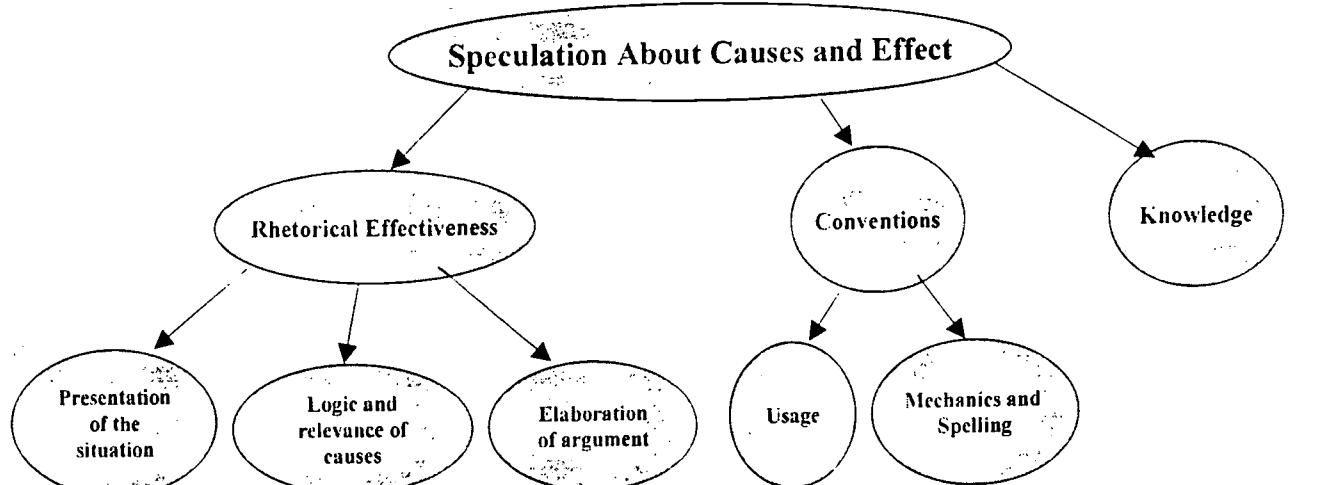


Chart 2

Dimensions indicating the construct of incidence (grade 3)

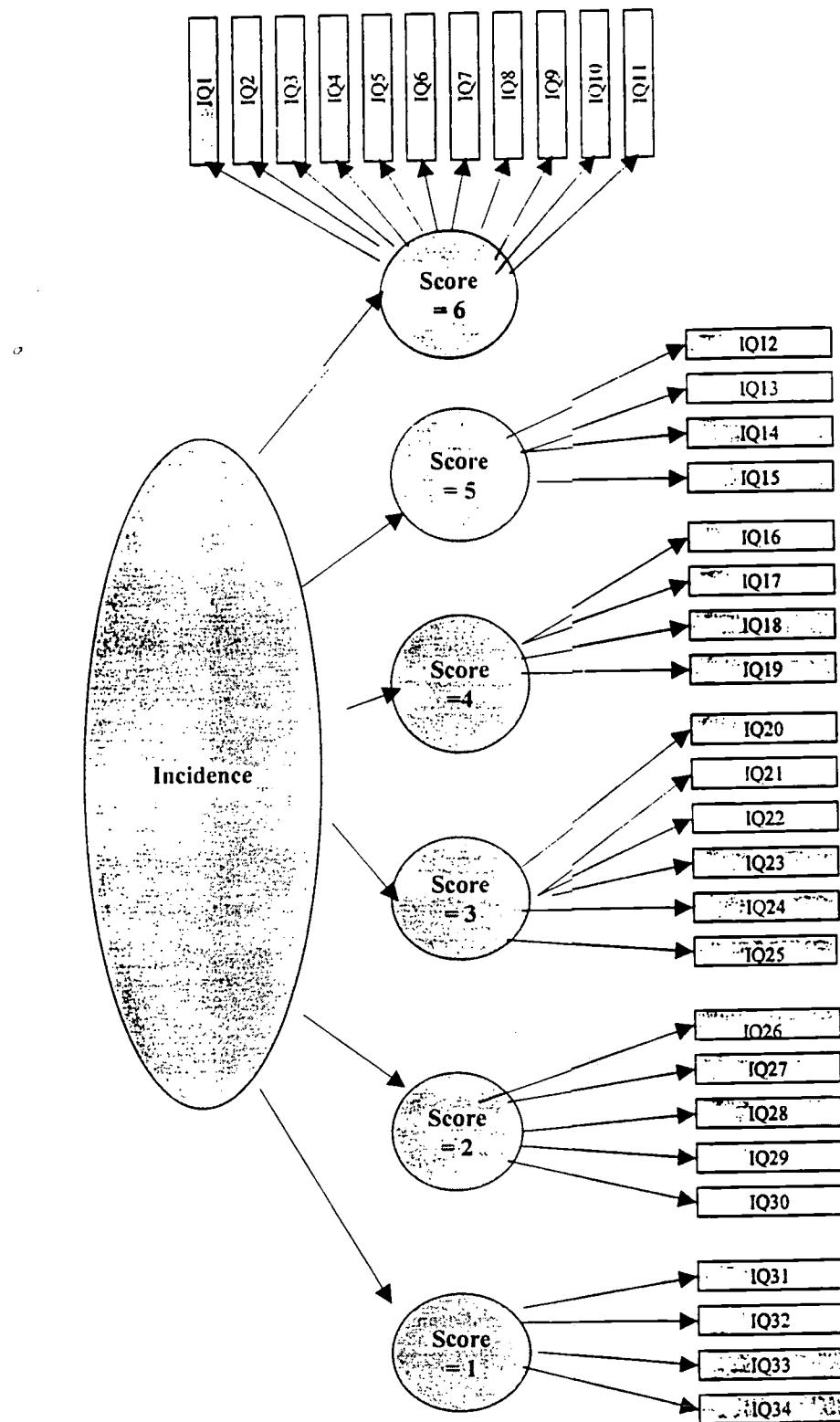


Chart 3

Dimensions indicating the construct of context (grade 3)

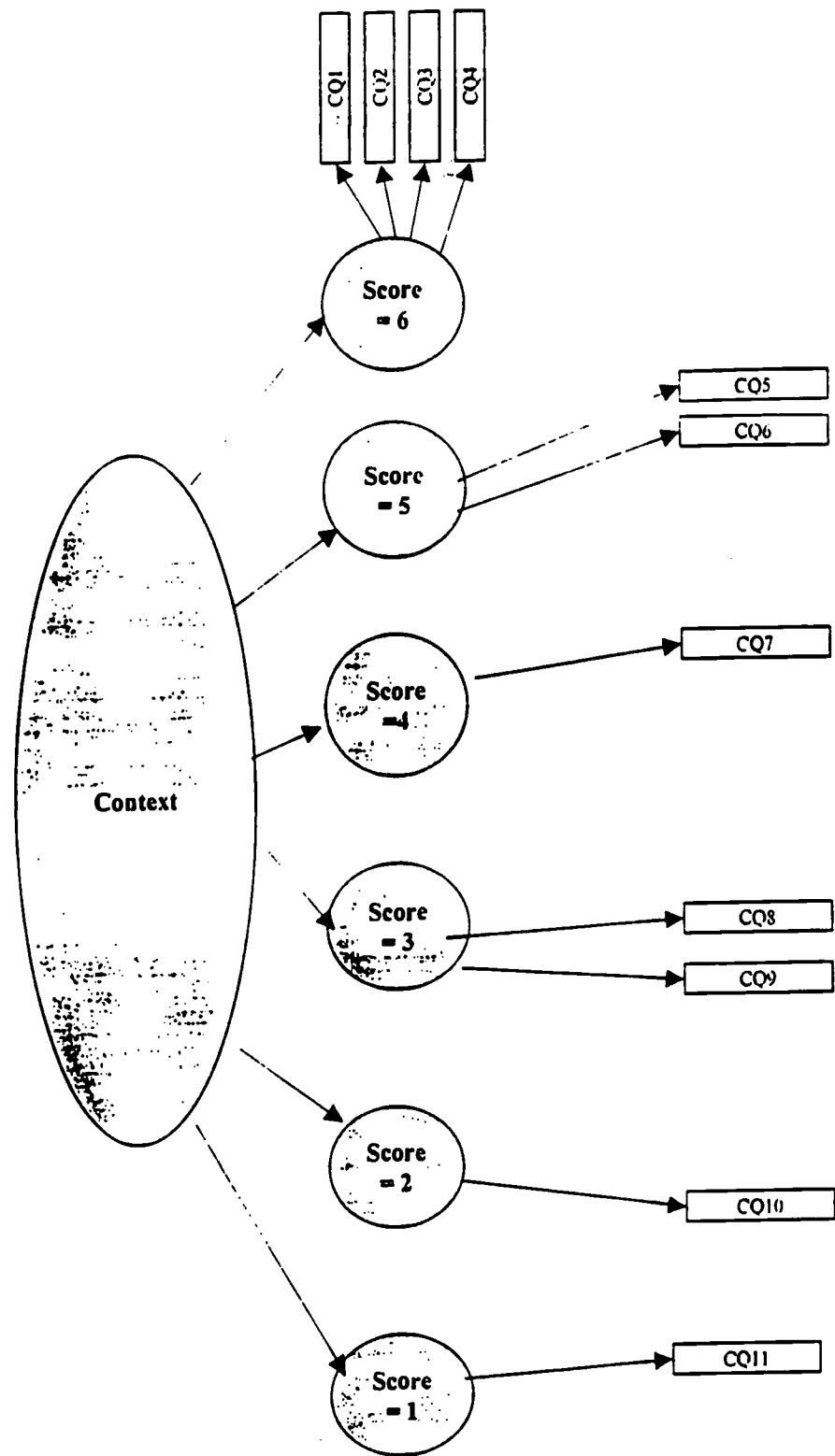


Chart 4

Dimensions indicating the construct of voice and style (grade 3)

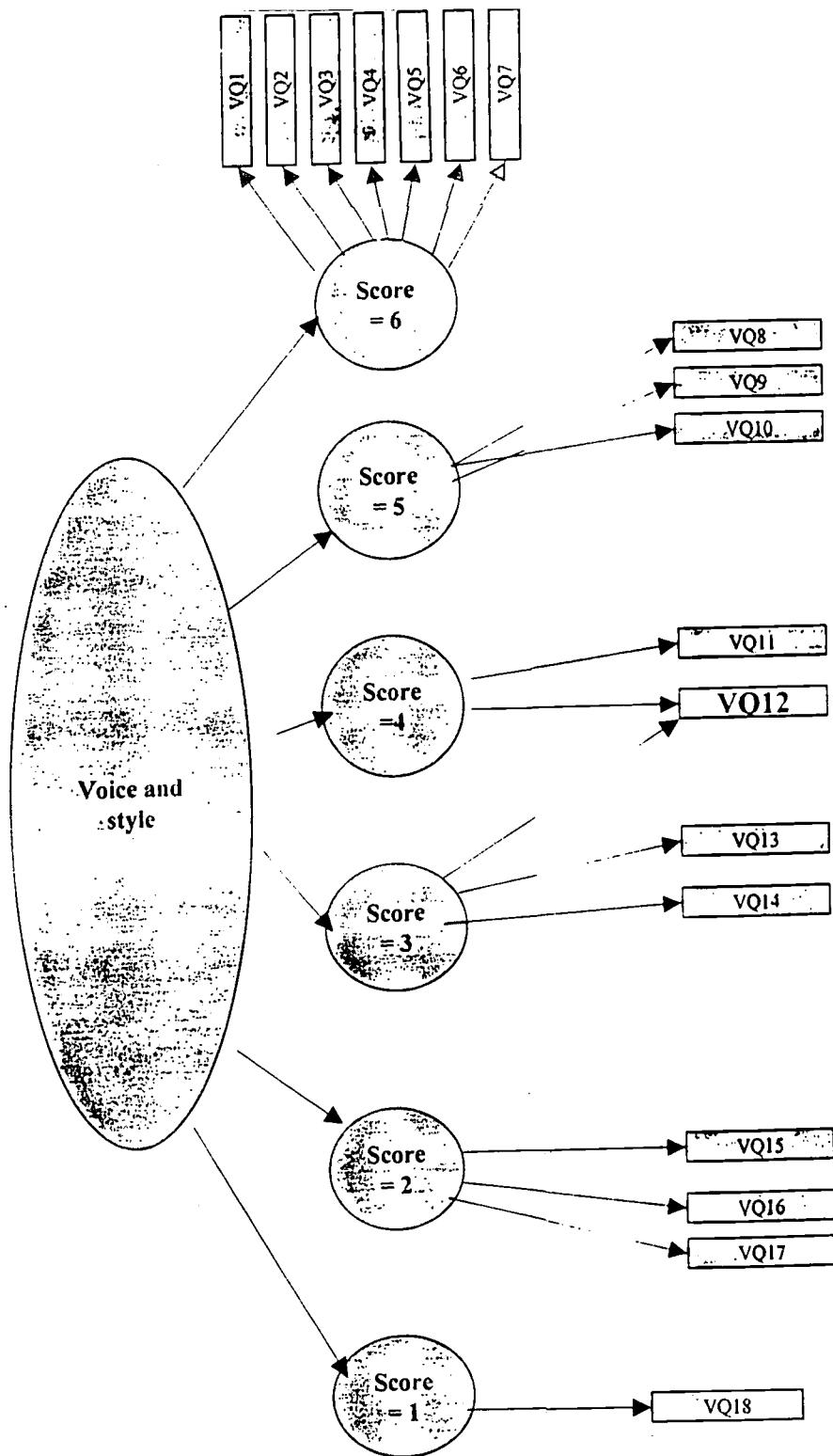


Chart 5

Dimensions indicating the construct of significance (grade 3)

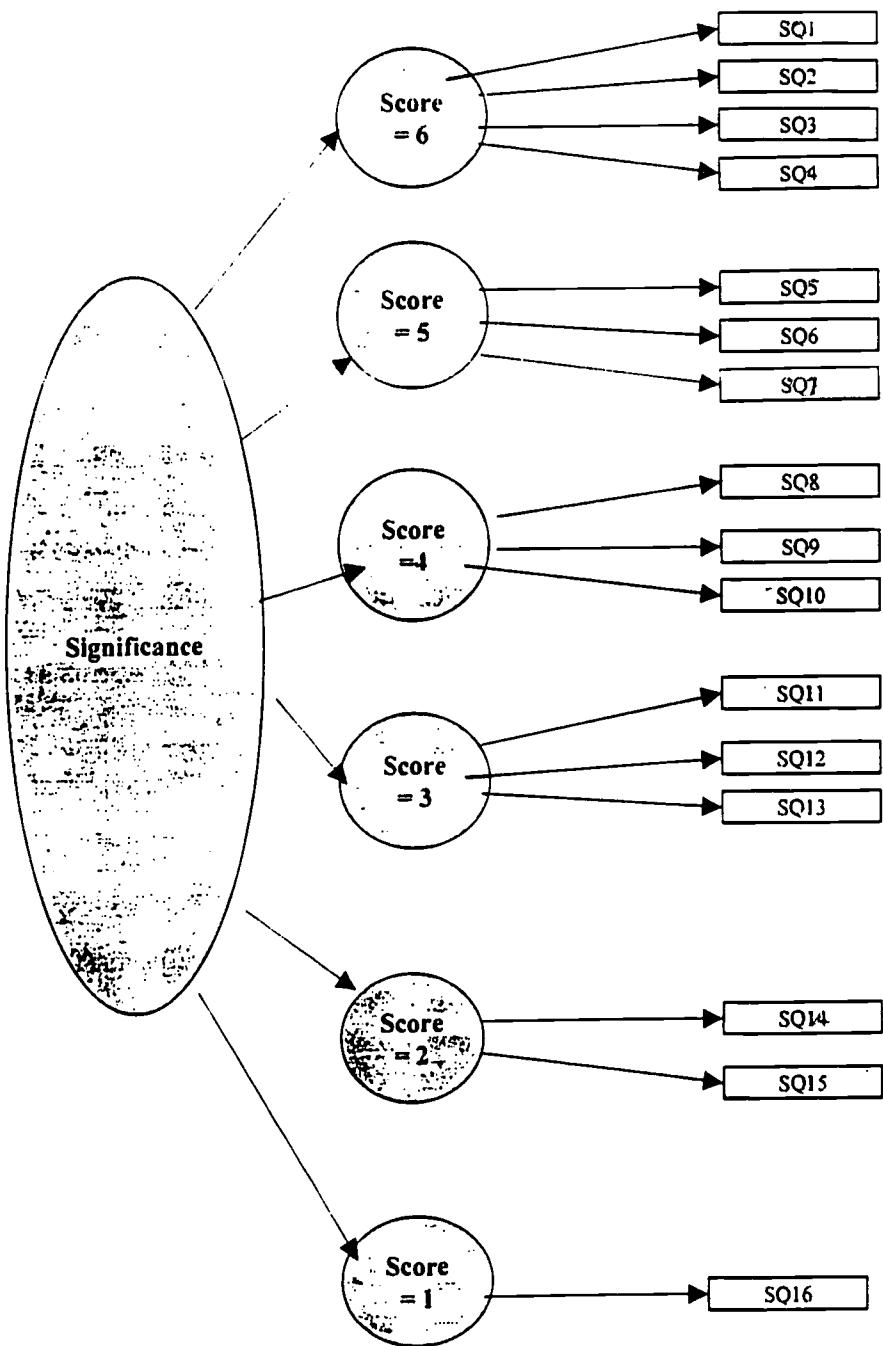


Chart 6

Dimensions indicating the construct of identification of subject (grade 5)

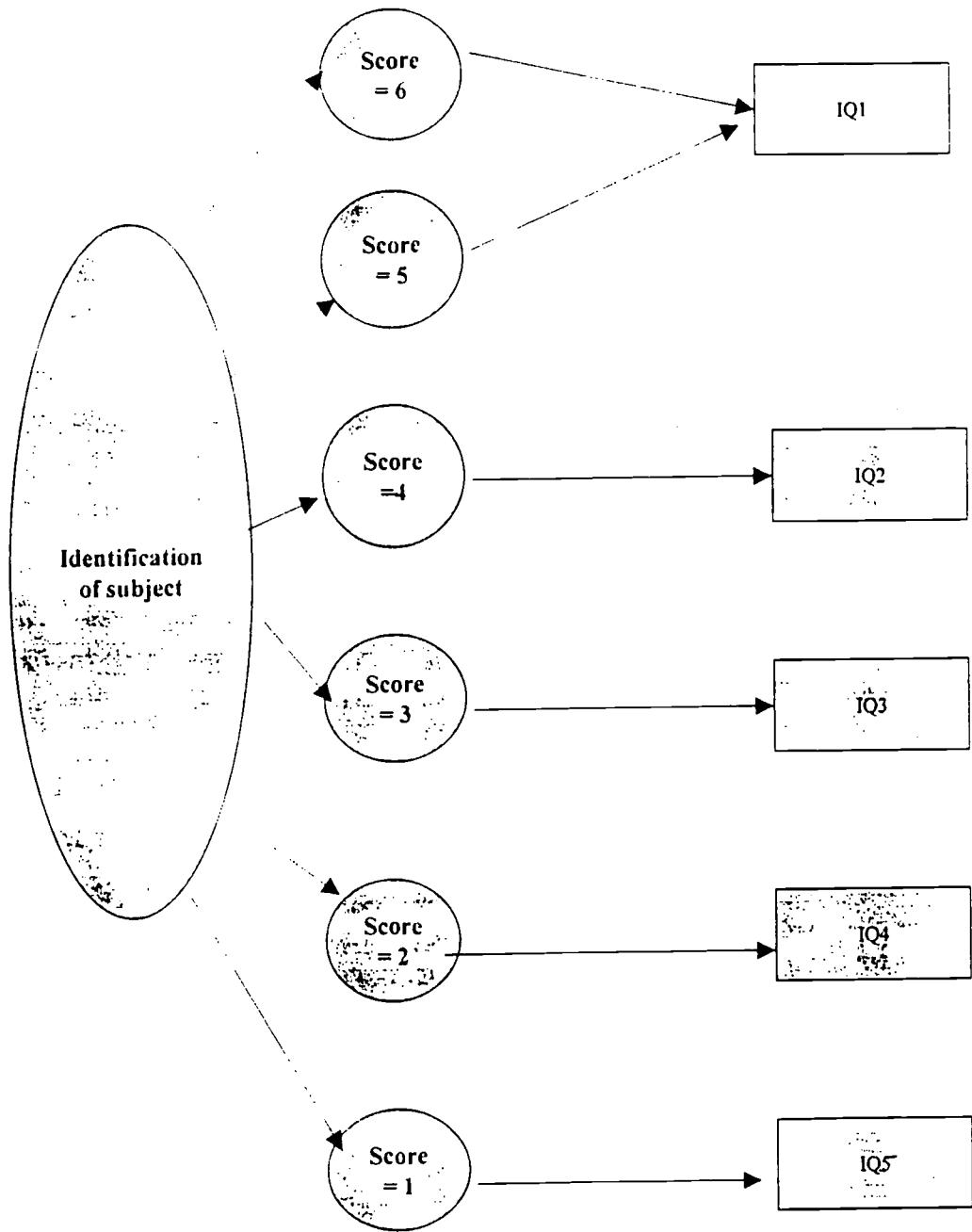


Chart 7

Dimensions indicating the construct of context (grade 5)

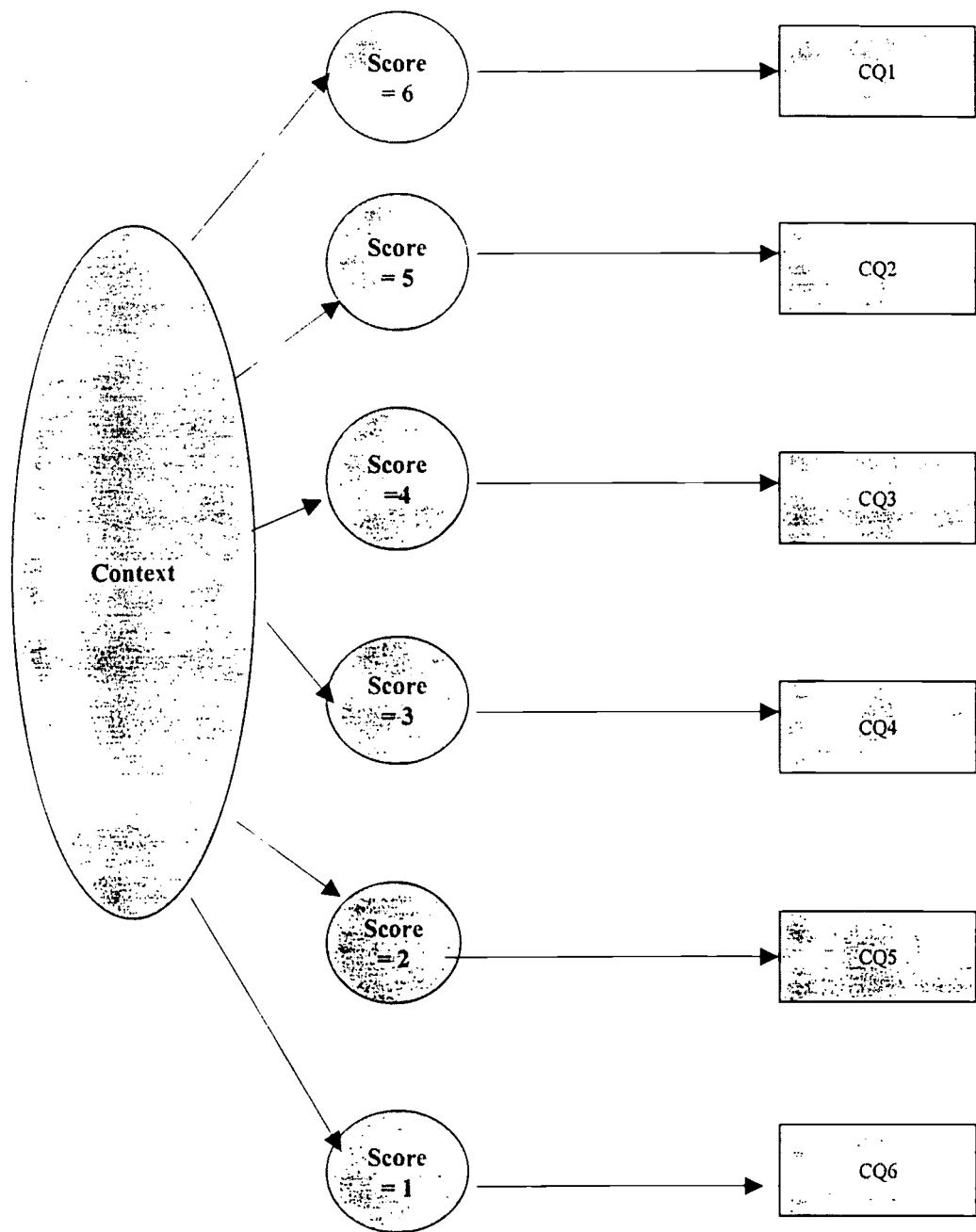


Chart 8

Dimensions indicating the construct of observational stance (grade 5)

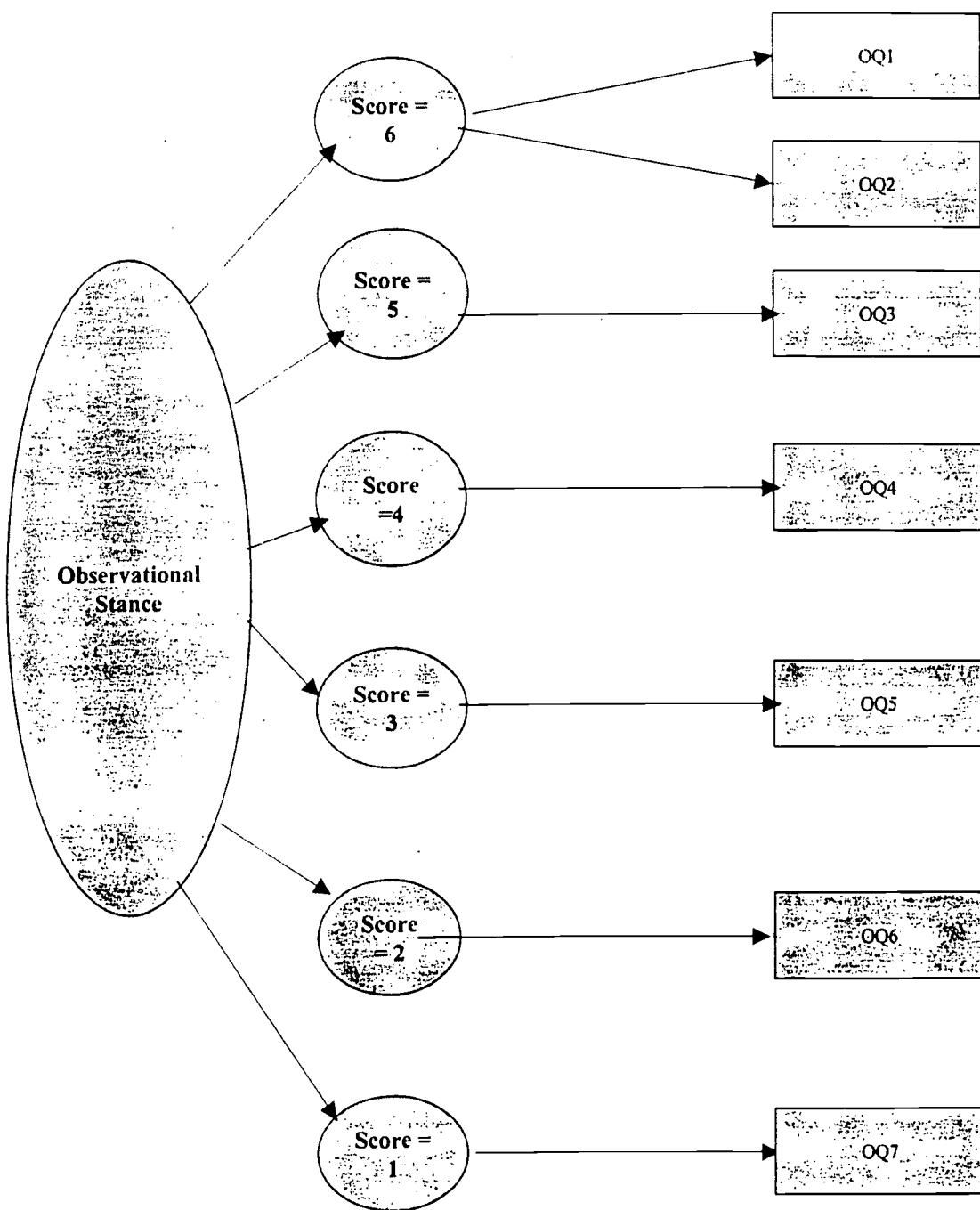


Chart 9

Dimensions indicating the construct of presentation of the experience (grade 5)

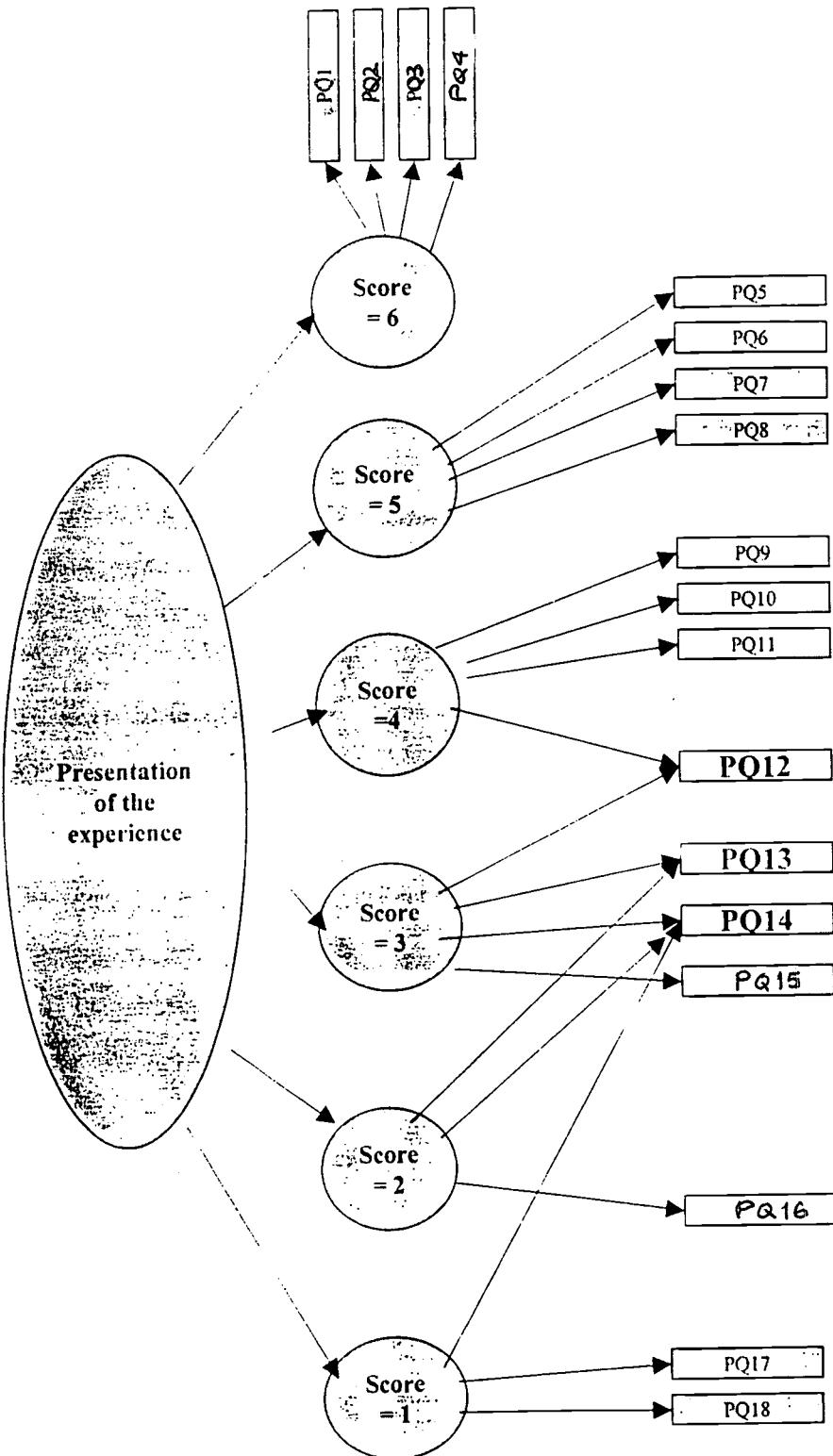


Chart 10

Dimensions indicating the construct of presentation of the situation (grade 8)

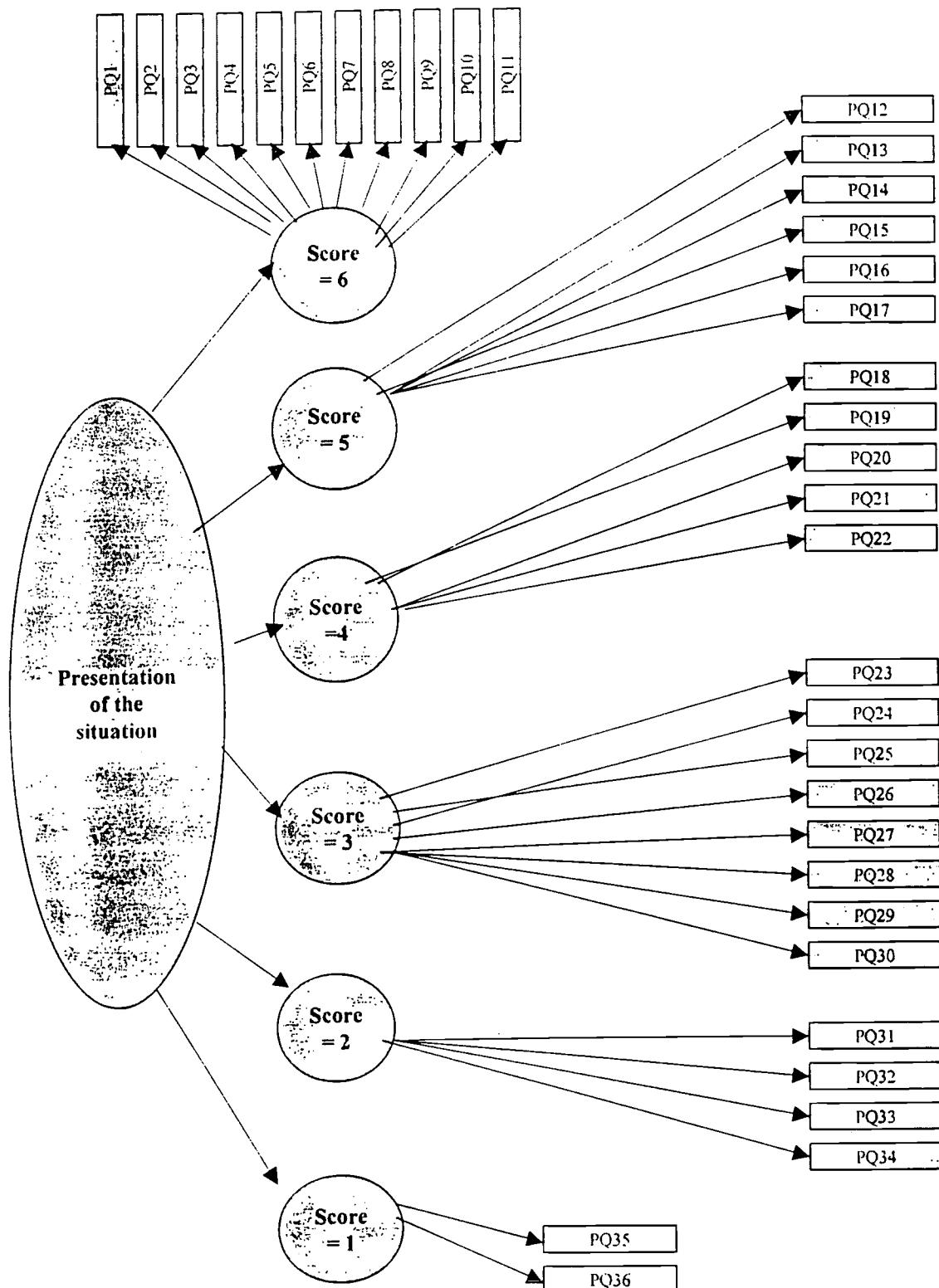


Chart 11

Dimensions indicating the construct of logic and relevance of causes (grade 8)

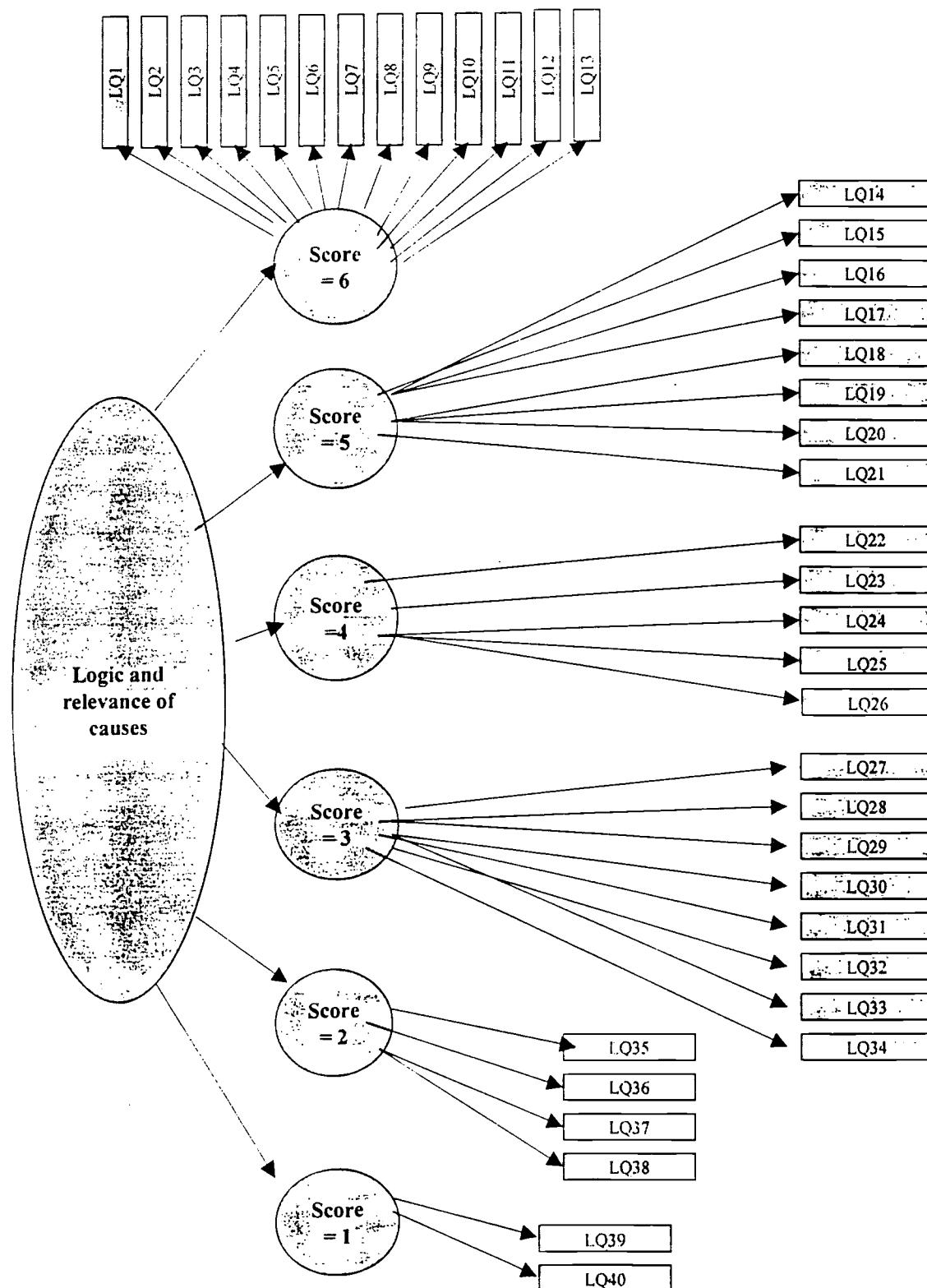
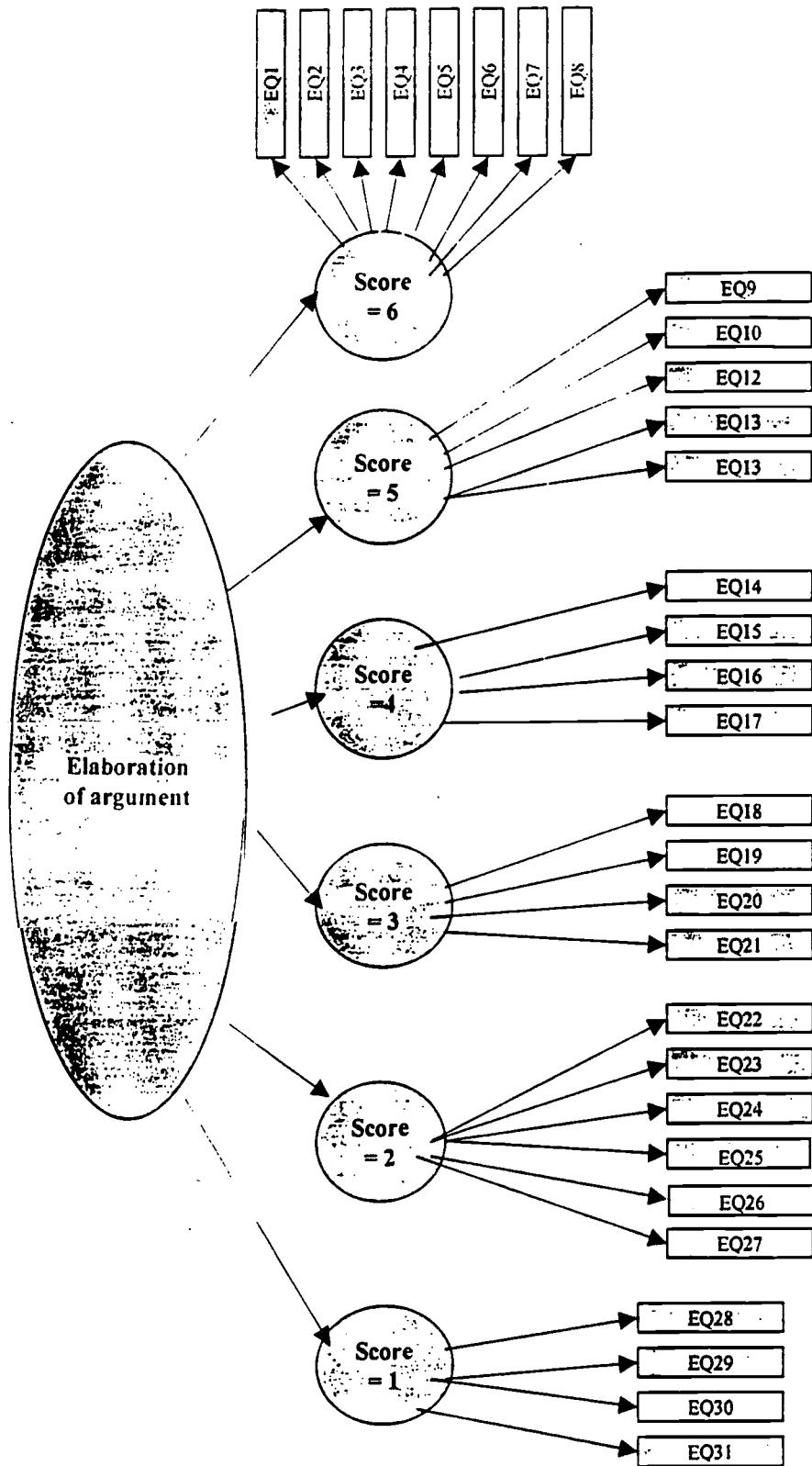


Chart 12

Dimensions indicating the construct of elaboration of argument (grade 8)



WRITING ASSESSMENT

Conventions Scoring Guide for ALL TYPES OF WRITING

score points	Criteria
6 Distinguished Achievement	Reader rarely spots errors in conventions <ul style="list-style-type: none">• Usage: Writer demonstrates a thorough command of written English. There may be an occasional lapse due to experimentation with complex ideas and styles.• Mechanics and Spelling: Writer demonstrates command of mechanics and spelling. Minor errors expected in first-draft writing may occur, but they are rare and do not take away from the effectiveness of the writing style.
5 Noteworthy Achievement	Reader seldom spots errors in conventions Writer may have difficulty with some more sophisticated conventions <ul style="list-style-type: none">• Usage: Writer demonstrates control of accepted usage; few errors are noticeable• Mechanics and Spelling: Writer demonstrates control of mechanics and spelling but may commit a few errors repeatedly. These do not detract from the overall impression of the essay.
4 Satisfactory Achievement	Reader sometimes spots errors in conventions <ul style="list-style-type: none">• Usage: Writer gives general evidence of an understanding of common usage while committing more than one kind of error. The reader may be aware of these errors but they do not hinder understanding.• Mechanics and Spelling: Writer demonstrates general control of mechanics and spelling but gives evidence of different kinds of errors throughout the essay. The essay may nevertheless be read with relative ease and few distractions.
3 Some Indication of Achievement	Reader finds numerous errors in conventions <ul style="list-style-type: none">• Usage: Writer demonstrates some control of the conventions of usage but frequent errors appear. These usage problems may cause misunderstanding on the part of the reader because the meaning is unclear.• Mechanics and Spelling: Writer shows some control of mechanics and spelling but commits many errors repeatedly. The errors that occur interrupt the flow of ideas, which may confuse the reader.
2 Limited Indication of Achievement	Reader is continually aware of errors in conventions <ul style="list-style-type: none">• Usage: Writer demonstrates limited understanding of the convention of usage. The frequency and seriousness of usage problems may result in a lack of understanding in some areas, but most of the essay can be read with comprehension of the writer's intent.• Mechanics and Spelling: Writer demonstrates little control, committing frequent and serious errors in mechanics and spelling. These errors cause misunderstanding and confusion on the part of the reader.
1 Few Indications of Achievement	Reader is disturbed by repeated errors in conventions <ul style="list-style-type: none">• Usage: Writer demonstrates very little control of conventions of usage, or the piece may be so limited that there is little on which to base a judgment. Essay may be unintelligible.• Mechanics and Spelling: Writer demonstrates little ability in mechanics and spelling. Serious errors may occur with regularity, or the piece may be too brief to evaluate the writer's level of proficiency with English language conventions.

OFF TOPIC papers are scored for conventions only

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